

Summary of Mitigation Measures

Summary of Mitigation Measures

Type of Measure	PPPs, PDFs, and Mitigation Measures
3.1 AESTHETICS	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to aesthetics:</p> <p>PPP AESTH-1 (<i>OSA PEIR MMRP Aesthetics Standard Condition</i>) Compliance with Municipal Code and applicable Planned Community text documents to ensure that height, bulk, architecture and/or signage will comply with code requirements.</p> <p>PPP AESTH-2 (<i>OSA PEIR MMRP Aesthetics Landscaping Standard Condition LS1</i>) Prior to the issuance of a building permit, the applicant shall submit to the Director of Development Services for review and approval a precise landscape and irrigation construction plan prepared by a licensed landscape architect for the project consistent with the conceptual landscape plans approved by the Planning Commission.</p> <p>PPP AESTH-3 (<i>OSA PEIR MMRP Aesthetics Landscaping Standard Condition LS2</i>) Prior to permit final inspection for the project, the applicant shall have installed landscaping and irrigation in accordance with the approved plan. The applicant shall submit a landscape installation verification letter to the Director of Development Services from a licensed landscape architect indicating that the landscaping for the project was installed in accordance with the approved plan.</p> <p>PPP AESTH-4 (<i>OSA PEIR MMRP Aesthetics Light and Glare Standard Condition of Approval LG1</i>) Prior to issuance of a grading permit, the applicant shall submit a photometric survey for the site. In addition, the applicant shall provide a note on the lighting plans that states no direct lighting spillage shall be permitted to shine on any other property. The proposed lighting standards shall be hooded or shielded to focus the light downward. A grading permit shall not be issued until the lighting has been reviewed and approved by the Director of Development Services.</p> <p>PPP AESTH-5 (<i>OSA PEIR MMRP Aesthetics Mechanical Equipment Standard Conditions of Approval ME2</i>) Prior to issuance of a building permit, the applicant shall demonstrate that mechanical equipment placed on any roof such as, but not limited to, air conditioning and heating, shall be screened from view.</p> <p>PPP AESTH-6 (<i>OSA PEIR MMRP Aesthetics Model Home Complex Standard Condition of Approval: MHC1</i>) Within 60 days after the termination of the use of the subject property as a model home/sales complex, the parking lot and temporary fencing shall be removed or revised as necessary to comply with the current applicable zoning regulations. Within six months following the removal of the parking lot improvement and trailer, the lots upon which the parking lot and trailer were situated shall be either planted with grass or improved with dwellings.</p>
Project Design Features	None

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Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures (3.5-1 through 3.5-4) are taken directly from the OSA PEIR. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and bold underlined to signify additions. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>AE MM-1 (OSA Program EIR Mitigation Measure 3.1-1) Prior to issuance of a precise grading permit for the project, the applicant shall submit a lighting plan to the Development Services Department for review and approval. The plan shall specify the lighting type and placement to ensure that the effects of security lighting are limited as a means of minimizing night lighting and the associated impacts to aesthetics. Prior to completion of final plans and specifications, the City of Lake Forest shall review the plans and specifications to ensure that all light fixtures will use glare-control visors, arc tube suppression caps, and will use a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam. Completion of this measure shall be monitored and enforced by the City of Lake Forest.</p> <p>AE MM-2 (OSA PEIR MMRP Mitigation Measure 3.1-2) All lighting and advertising (including signage) shall be oriented in such a manner to reduce the amount of light shed onto adjacent residential development and incorporate “cut-off” shields as appropriate to minimize any increase in lighting at adjacent residential properties.</p> <p>AE MM-3 (OSA PEIR MMRP Mitigation Measure 3.1-3) All interior floodlights, exterior parking lot, and other security lighting shall be directed away from adjacent uses and towards the specific location intended for illumination. State-of-the-art fixtures shall be used, and all lighting shall be shielded to minimize the production of glare and light spill onto both existing and proposed residential units. A lighting design plan shall be submitted to the City for approval at the time of building permit to issuance of precise grading permits for each specific development project.</p> <p>AE MM-4 (OSA PEIR MMRP Mitigation Measure 3.1-4) Landscape illumination and exterior sign lighting shall follow the City’s Municipal Code and applicable Planned Community design guidelines and be accomplished with low-level unobtrusive fixtures.</p>
Project-Specific Mitigation Measures	None
3.2 AGRICULTURE AND FORESTRY RESOURCES	
Existing Plans, Programs, and Policies	None
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None

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3.3 AIR QUALITY	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to air quality:</p> <p>PPP AIR-1 (<i>OSA PEIR MMRP Air Quality Standard Condition</i>) Project level review to determine construction and operation emissions. (<i>Satisfied with the Air Quality Analysis in this Initial Study</i>)</p> <p>PPP AIR-2 (<i>OSA PEIR MMRP Air Quality Standard Condition</i>) Compliance with Title 24, Part 6, California’s Energy Efficiency Standards for Residential and Nonresidential Buildings.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures are taken directly from the OSA PEIR with no changes made. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and <u>bold underlined</u> to signify additions.</p> <p>AQ MM-1 (<i>OSA PEIR MMRP Mitigation Measure MM 3.3-1</i>) The developer shall require by contract specifications that all diesel-powered equipment used would be retrofitted with after-treatment products (e.g., engine catalysts) to the extent that it is readily available in the South Coast Air Basin. Contract specifications language shall be reviewed by the City prior to issuance of a grading permit.</p> <p>AQ MM-2 (<i>OSA MMRP PEIR Mitigation Measure MM 3.3-2</i>) The developer shall require by contract specifications that all heavy duty diesel powered equipment operating and refueling at a project site within the Project Area would use low-NOx diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California ARB diesel) in the South Coast Air Basin (this does not apply to diesel powered trucks traveling to and from the project sites within the Project Area). Contract specification language shall be reviewed by the City prior to issuance of a grading permit. (<i>Mitigation Measure MM 3.3-2 is deleted because low-NOx diesel fuel is no longer manufactured and is not available for purchase.</i>)</p> <p>AQ MM-3 (<i>OSA PEIR MMRP Mitigation Measure MM 3.3-3</i>) The developer shall require by contract specifications that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) and low-emission diesel construction equipment would be utilized to the extent that the equipment is readily available and cost effective in the South Coast Air Basin. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.</p> <p>AQ MM-4 (<i>OSA MMRP PEIR Mitigation Measure MM 3.3-4</i>) The developer shall require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer’s specification for the duration of construction. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.</p>

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	<p>AQ MM-5 (OSA PEIR MMRP Mitigation Measure MM 3.3-5) The developer shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.</p> <p>AQ MM-6 (OSA PEIR MMRP Mitigation Measure MM 3.3-6) The developer shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.</p> <p>AQ MM-7 (OSA PEIR MMRP Mitigation Measure MM 3.3-7) The developer shall implement dust control measures consistent with SCAQMD Rule 403— Fugitive Dust during the construction phases of new project development. Contract specification language shall be reviewed for inclusion of this language by the City prior to issuance of a grading permit. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation:</p> <ul style="list-style-type: none"> • Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer’s specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days) • Replace ground cover in disturbed areas as quickly as possible • Enclose, cover, water twice three times daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content • Water trucks will be utilized on the site and shall be available to be used throughout the day during site grading to keep the soil damp enough to prevent dust being raised by the operations. Water active grading sites at least twice daily • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period • All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code • Sweep streets at the end of the day • Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip on a gravel surface to prevent dirt and dust from impacting the surrounding areas. • Apply water three times daily or chemical soil stabilizers according to manufacturers’ specifications to all unpaved parking or staging areas or unpaved road surfaces • Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads
Project-Specific Mitigation Measures	<p>AQ MM-8 The construction contractor shall implement one of the following construction equipment or phasing measures. Prior to issuance of grading permits the City shall ensure that grading plans clearly show one of the following requirements will be implemented:</p>

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	<p>1) During construction, large off-road construction equipment with internal combustion engines having ratings of 300 horsepower or higher (i.e., dozers and scrapers) shall meet United States Environmental Protection Agency-Certified emissions standards for Tier 3 off-road emissions equipment. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. During construction the construction contractor shall maintain a list of all operating equipment in use on the project site for verification by the City Engineer. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite.</p> <p>2) The construction contractor shall be required to start the onsite road paving or offsite road improvements after project grading is completed. The grading, and utilities and underground construction phases shall not overlap with the offsite road improvements.</p>
3.4 BIOLOGICAL RESOURCES	
Existing Plans, Programs, and Policies	None
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures are taken directly from the OSA PEIR with no changes made. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed residential project. In cases where these OSA mitigation measures have been satisfied by studies prepared for this Initial Study, it is so noted in <i>italics</i>.</p> <p>The Pinnacle at Serrano Highlands project has partially satisfied mitigation measure BR MM-1 below; however, focused surveys for sensitive species likely to occur onsite in appropriate seasons for each species are still required.</p> <p>BR MM-1 (<i>OSA PEIR MMRP Mitigation Measure 3.4-1</i>) Sensitive Species Surveys. Where future development projects have the potential to reduce or eliminate habitat for native plant and wildlife species or sensitive habitats, including but not limited to those listed in OSA PEIR Appendix E (Sensitive Species Potentially Occurring within the Project Area), the project applicant shall conduct biological field surveys of the Project Area to characterize the extent and quality of habitat that would be impacted by project development. Surveys shall be conducted in accordance with current CDFG or USFWS survey protocols for the target species by qualified biologists or botanists. If no sensitive species are observed and the regulatory agencies agree with those findings then no further mitigation will be required for the species. Similarly, if no sensitive habitats are observed and the regulatory agencies agree with those findings then no further mitigation will be required. If sensitive species or habitats are documented on a specific site, and the species or habitat is covered by the NCCP/HCP the applicant shall conform and comply with the applicable requirements of the NCCP/HCP and proceed with MM 3.4-2. If the species or habitat is not covered in the NCCP/HCP, then refer to MM 3.4-3. For impacts to wetlands and other aquatic habitats, refer to MM 3.4-4. (<i>Satisfied by: Special-Interest Plant Survey Results for Serrano Highlands, LSA Associates, Inc., February 2012; Sensitive Plant Survey Results for Serrano Highlands, LSA Associates, Inc., July 2005</i>).</p> <p>BR MM-2 (<i>OSA PEIR MMRP Mitigation Measure 3.4-2</i>) Loss of Coastal Sage Scrub Habitat and Plant and Animal Species Protected by the NCCP/HCP. Prior to recordation of a subdivision map or issuance of a grading permit, whichever comes first, the Applicant shall retain a qualified, permitted biologist to confirm the presence and quantity of coastal sage scrub habitat located on the project site. If coastal sage scrub habitat is found to be located on the project site, the Applicant shall submit proof to</p>

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	<p>the Director of Development Services that in-lieu fees have been paid to the County of Orange Central/Coastal Natural Communities Conservation Plan (NCCP) Reserve. <i>Note: the presence and quantity of coastal sage scrub has been identified in this Initial Study/Supplemental Mitigated Negative Declaration and in the Serrano Highlands Biological Resources Analysis and the Sensitive Plant Survey Results for Serrano Highlands, LSA Associates, Inc., both dated July 2005.</i>)</p> <p>The Applicant shall also demonstrate to the satisfaction of the Director of Development Service compliance with the following NCCP construction impact avoidance measures or such measure in effect at the time of construction:</p> <ol style="list-style-type: none"> 1) To the maximum extent practicable, no grading of CSS habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these “construction-related minimization measures,” are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities will provide USFWS/CDFG with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens and any other CSS Identified Species that are not otherwise flushed and will carry out the following measures only to the extent as practicable in the context of the public health and safety considerations. 2) Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of CSS habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of CSS, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans. 3) A monitoring biologist, acceptable to USFWS/CDFG will be on site during any clearing of CSS. The landowner or relevant public agency/utility will advise USFWS/CDFG at least seven (7) calendar days (and preferably fourteen (14) calendar days) prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFG to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis. 4) Following the completion of initial grading/earth movement activities, all areas of CSS habitat to be avoided by construction equipment and personnel will be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking or storage of equipment or materials will be permitted within such marked areas. 5) In areas bordering the NCCP reserve system or Special Linkage/Special Management areas containing significant CSS identified in the NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent CSS identified in the NCCP/HCP for protection. Preconstruction meetings involving the monitoring biologist, construction supervisors and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.

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	<p>6) CSS identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.</p> <p>BR MM-3 (<i>OSA PEIR MMRP Mitigation Measure 3.4-3</i>) Loss of Species or Habitats Not Covered by the NCCP/HCP. To mitigate for potential impacts to species or habitats not covered by the NCCP/HCP the following process shall be followed. The applicant has two options: (1) the applicant can obtain suitable replacement habitat and dedicate that property to the conservation and protection of sensitive species in perpetuity, or (2) the applicant can satisfy the requirements of the FESA and CESA under the consultation and permitting provisions of these regulations. In both of these options, the applicant shall first consult with the appropriate resource agency (CDFG and/or USFWS) and establish a mitigation plan for the specific species or habitat. Appropriate mitigation shall be identified in a mitigation plan prepared by the applicant. In this mitigation plan the applicant shall demonstrate capacity for funding appropriate mitigation and the mitigation must be legally assured. Habitat acquisition and set asides shall occur in areas with long-term conservation potential. Any mitigation proposed shall be approved by the City and appropriate resource agency prior to implementation. (<i>Satisfied by: Special-Interest Plant Survey Results for Serrano Highlands, LSA Associates, Inc., February 2012; Sensitive Plant Survey Results for Serrano Highlands, LSA Associates, Inc., July 2005; and Biological Resources Analysis, Serrano Highlands, City of Lake Forest, County of Orange, California. LSA Associates, Inc., June 2005</i>).</p> <p>BR MM-6 (<i>OSA PEIR MMRP Biological Resources Mitigation Measure MM 3.4-4-A</i>) Wetland Delineation. Prior to approval of Tentative Tract or Parcel Maps, a qualified wetland specialist shall conduct a wetland delineation in accordance with U.S. Army Corps of Engineers (ACOE) USACE methodology of all jurisdictional waters, seeps and stream channels within a site. If appropriate, this specialist shall also submit a request for a streambed alteration agreement from CDFG because CDFG also has jurisdiction over lakes and streams under Section 1600 of the Fish and Game Code. The wetland specialist shall prepare and submit a request for a jurisdictional determination to the ACOE USACE or CDFG as appropriate. Those waters not subject to the ACOE USACE jurisdiction could fall under the regulatory control of the local RWQCB. The wetland specialist shall submit the delineation documents along with the ACOE USACE jurisdictional determination to the RWQCB and request an assessment of jurisdiction. If the areas in question are subject to the ACOE USACE or RWQCB jurisdiction then the following two measures shall be implemented as required. If the areas in question are not jurisdictional, then there is no impact to wetlands and no further action is required. (<i>Satisfied with: Jurisdictional Delineation Report, Serrano Highlands, Lake Forest, County of Orange, California. LSA, August 2011</i>)</p> <p>BR MM-7 (<i>OSA PEIR MMRP Biological Resources Mitigation Measure MM 3.4-4-B</i>) Permitting. Prior to issuance of grading permits, the wetland specialist shall prepare an application for fill of waters subject to the U.S. Army Corps of Engineers (ACOE) USACE jurisdiction as determined in MM 3.4-4-A. If appropriate, this specialist shall also submit a request for a streambed alteration agreement from CDFG because CDFG also has jurisdiction over lakes and streams under Section 1600 of the Fish and Game Code. For wetlands that are not subject to the ACOE USACE jurisdiction within the Project Area, but RWQCB has indicated that they will assert jurisdiction, an application for a Waste Discharge Requirement or Waiver of Waste Discharge Requirement shall be submitted to the local RWQCB. The regulatory requirements of contained within the Clean Water Act, the Waste Discharge Requirement, and the Streambed Alteration Agreement would mandate minimal intrusion into jurisdictional areas and compensatory mitigation for permanent impacts to these areas.</p>

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	<p>BR MM-8 (OSA PEIR MMRP Biological Resources Mitigation Measure MM 3.4-4-C) Restoration Plan. Once an approved wetland delineation is in place, the wetland specialist shall develop a comprehensive wetland restoration plan to offset impacts to these resources. Restoration could include on- or off-site construction of wetlands, contribution of funds to a local mitigation bank, or restoration of existing yet relatively poor quality wetlands. The <u>U.S. Army Corps of Engineers USACE</u> goal is to permit no net loss of functions and values of wetland habitat. The replacement ratio of wetland acreage required to achieve this goal is a minimum of 1(new):1(old). <u>The exact ratio will be determined in the permit process with these agencies.</u></p> <p>BR MM-9 (OSA Program EIR Mitigation Measure MM 3.4-5) Mitigation for Fragmentation of Habitat and Wildlife Movement Corridors. In order to minimize the fragmentation of habitat and wildlife movement corridors the City shall require the applicant to include, to the extent feasible, specific design features to maintain connectivity between remaining open spaces. (Note that the project applicant has satisfied BR MM-8 through designation of several acres to be conserved by the project homeowner's association as natural open space.)</p>
Project-Specific Mitigation Measures	<p>BR MM-4 Construction shall either be scheduled outside the breeding season (December 31–July 31); or, if construction must be completed during the breeding season, surveys for nesting birds must be conducted. Procedures for conducting nesting bird surveys are described in BR MM-2.</p> <p>BR MM-5 Prior to the issuance of a building permit, the applicant shall submit to the Director of Development Services for review and approval a precise landscape and irrigation construction plan prepared by a licensed landscape architect for the project consistent with the conceptual landscape plans approved by the Planning Commission. Prior to approval, all fuel modification and revegetation/landscaping plans shall be reviewed by a biologist with a working knowledge of local natural habitats and plant species. All nonnative plants that are potentially invasive via airborne seeds, or that are particularly difficult to control once escaped, will be prohibited from all parts of the project. Prohibited plant species include but are not limited to the following:</p> <ul style="list-style-type: none"> • Tree-of-heaven (Ailanthus sp.) • Giant reed (Arundo donax) • Garland chrysanthemum (Chrysanthemum coronarium) • Pampas grass (Cortaderia spp.) • Brooms (Cytisus spp.) • Bermuda buttercup (Oxalis pes-caprae) • Fountain/Kikuyu grass (Pennisetum spp.) • German ivy (Senecio mikanoides) • Tamarisk (Tamarix spp.)
3.5 CULTURAL RESOURCES	
Existing Plans, Programs, and Policies	None

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Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures (3.5-1 through 3.5-8) are taken directly from the OSA PEIR. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and <u>bold underlined</u> to signify additions. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>CR MM- 1 (OSA PEIR MMRP Mitigation Measure 3.5-1) Prior to issuance of a grading permit for any site within the Project Area, a qualified archaeologist shall be retained by the applicant for that grading permit to provide professional archaeological services. The archaeologist shall be present at the pre-grading conference to establish procedures for archaeological resource surveillance. Those procedures shall include provisions for temporarily halting or redirecting work to permit sampling, identification and evaluation of resources deemed by the archaeologist to potentially be historical resources or unique archaeological resources under CEQA. If, before grading, any portions of the property subject to the grading permit have been identified as sites, which may have such resources present and may be impacted by development, the archaeologist shall conduct a site survey and records search and such further examinations as may be needed to assess the significance of the resources. If the archaeological resource is determined to be a unique archaeological resource, options for avoidance of <u>or</u> preservation in place shall be evaluated and implemented if feasible. In the event that avoidance or preservation in place is infeasible and the archaeologist determines that the potential for significant impacts to such resources exists, a data recovery program shall be expeditiously conducted. The archaeologist also shall conduct on-site archaeological monitoring for the grading operation. Should historical resources or unique archaeological resources be discovered during the grading operation, grading activities shall be modified to allow expeditious and proper analysis and/or salvage of the resources. Disposition of the resources shall be within the discretion of the City of Lake Forest. <u>If prehistoric archaeological sites (not isolates) are discovered during monitoring of earthmoving, Native American representatives shall be contacted to observe activities and shall contribute to discussion of any treatment proposed.</u></p> <p>CR MM-2 (OSA PEIR MMRP Mitigation Measure 3.5-2) The qualified archaeologist <u>retained by the applicant</u> shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest.</p> <p>CR MM-3 (OSA PEIR MMRP Mitigation Measure 3.5-3) Artifacts recovered shall be prepared, identified, and catalogued before donation to the accredited repository designated by the City of Lake Forest. State of California Guidelines for the Curation of Archaeological Collections shall be consulted regarding the treatment of recovered artifacts. Any artifacts determined to be insignificant shall be offered to local schools for use in educational programs.</p> <p>CR MM-4 (OSA PEIR MMRP Mitigation Measure 3.5-4) The qualified archaeologist <u>retained by the applicant</u> shall prepare a final report to be filed with the site developer(s), the City of Lake Forest, and the South Central Coastal Information Center. The report shall include a list of specimens recovered, documentation of each locality, interpretation of artifacts recovered and shall include all specialists' reports as appendices.</p> <p>CR MM-5 (OSA PEIR MMRP Mitigation Measure 3.5-5)</p>

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	<p>Before issuance of a grading permit, a qualified paleontologist shall be retained by the site developer(s) to provide professional paleontological services. <u>Prior to commencement of construction, the paleontologist will develop a research design, based on current information, which will include specific research questions and what types of data (fossils, micropaleontological analysis, etc) will permit those questions to be answered. The research design should be sufficient to ensure that future fossils recovered can be placed into a regional context and contribute new information to science. During</u> Specifically, during grading activities, the qualified paleontologist shall conduct on-site paleontological monitoring for the project site. Monitoring shall include inspection of exposed surfaces and microscopic examination of matrix to determine if fossils are present. The monitor shall have authority to divert grading away from exposed fossils temporarily in order to recover the fossil specimens. Cooperation and assistance from on-site personnel will greatly assist timely resumption of work in the area of the fossil discovery. <u>Fossil localities discovered require specific information be recorded on location and elevation of fossils, taking of samples for analysis, stratigraphic column be developed and fossils must be identified by qualified experts.</u></p> <p>CR MM-6 (OSA PEIR MMRP Mitigation Measure 3.5-6) The qualified paleontologist <u>retained by the applicant</u> shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest.</p> <p>CR MM-7 (OSA PEIR MMRP Mitigation Measure 3.5-7) Fossils recovered shall be prepared, identified, and cataloged before donation to an accredited repository designated by the City of Lake Forest. <u>The principal paleontologist will develop a research design to place newly and previously discovered fossils from the project area into a regional context and will specifically include research questions to be answered during fossil recovery work.</u></p> <p>CR MM-8 (OSA PEIR MMRP Mitigation Measure 3.5-8) The qualified paleontologist <u>retained by the applicant</u> shall prepare a final report to be filed with the site developer(s) and the City of Lake Forest. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered and shall include all specialists' reports as appendices.</p>
Project-Specific Mitigation Measures	None
3.6 GEOLOGY AND SOILS	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to geology and soils:</p> <p>PPP GEO-1 (OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G1) Prior to the issuance of precise grading permits, the applicant shall prepare and submit a final (precise) grading plan to the Building Division of the Development Services Department showing building footprints, new and revised pads and elevations of finished grades, drainage routes, retaining walls, erosion control, slope easements, structural best management practices conforming to the approved water quality management plan, and other pertinent information.</p>

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	<p>PPP GEO-2 (<i>OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G2</i>) Prior to the issuance of precise grading permits, the applicant shall in a manner meeting the approval of the City Engineer:</p> <ul style="list-style-type: none"> • Design provisions for surface drainage; and • Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and • Dedicate the associated easements to the City of Lake Forest, if determined necessary by the City Engineer. • Prior to building permit final inspection said improvements shall be constructed in a manner meeting the approval of the City Engineer. <p>PPP GEO-3 (<i>OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G3</i>) Prior to approval of the final design plans and issuance of a grading permit, the applicant shall conduct a site-specific geotechnical investigation for the entire site and prepare a report that fully assesses the geologic and soil conditions of the site. As part of the report preparation, soil sampling and any geotechnical testing will be completed at each location where structures are to be erected. The report shall provide grading and structural design recommendations for avoiding liquefaction, subsidence or collapse for each of the proposed structures. The recommendations shall be implemented by the Project Applicant.</p> <p>PPP GEO-4 (<i>OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G4</i>) During project grading and construction activities, the following measures shall be implemented by the applicant as monitored by the Director of Development Services and Director of Public Works/City Engineer.</p> <ol style="list-style-type: none"> a) Normal watering procedures or other dust palliative measures shall be followed during earth moving and construction operations to minimize fugitive dust emissions in compliance with SCAQMD Rule 403. Soil binders shall be spread on site, unpaved roads, and parking area in compliance with Rule 403. b) Where practical, heavy duty construction equipment shall be kept on-site when not in operation to minimize exhaust emissions associated with vehicles entering and exiting the project site. c) Restrict traffic speeds on all unpaved road to 15 miles per hour or less, and provide a flag person to properly guide traffic and ensure safety at the construction site. d) Suspend all grading operations when wind speeds exceed 25 miles per hour and during second stage smog alerts. e) Comply with SCAQMD Rules 402 and 403 which state that no dust impacts off-site sufficient to be called a nuisance are created and restrict visible emissions from construction and grading, respectively. f) Use low emission mobile construction equipment (i.e., tractors, scrapers, dozers, etc.) where practical. Shut off engines when not in use. g) Maintain construction equipment in peak operating condition to reduce operating emissions. <ol style="list-style-type: none"> 1) Use low sulfur fuel for equipment to the extent feasible. 2) Use electric equipment whenever practicable. 3) Moisten soil to grading to 12% soil moisture. 4) Water exposed surfaces at least twice daily under calm conditions and as often as needed on windy days when winds are less than 25 miles per hour or during dry weather in order to maintain a surface crust and prevent the release of visible emissions from the

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Type of Measure	PPPs, PDFs, and Mitigation Measures
	<p>construction site.</p> <ol style="list-style-type: none"> 5) Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation. 6) Wash mud-covered tires and under-carriages of any trucks leaving construction sites. 7) Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing project sites. 8) Provide for permanent sealing of all graded areas, as applicable, at the earliest practicable time after soil disturbance. <p>PPP GEO-5 (OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G5) This project necessitates the construction of public and/or private infrastructure improvements. Prior to the issuance of preliminary or precise grading permits, the applicant shall construct, or enter into an agreement and post security, in a form and amount acceptable to the City Engineer, guaranteeing the construction of public and/or private improvements, in conformance with applicable City standards and the City's Capital Improvement Policy, including but not limited to:</p> <ol style="list-style-type: none"> a) Street improvements including, but not limited to: pavement, curb and gutter, medians, sidewalks, drive approaches, street lighting, signing, striping as follows: b) Traffic signal systems, interconnect traffic signal preemption devices and other traffic control and management devices c) Storm drain facilities d) Subdrain facilities e) Landscaping and computerized irrigation control system (for all public streets, parks and public areas). f) Sewer, reclaimed and/or domestic water systems, as required by the appropriate sewer and water districts as well as the Orange County Fire Authority when appropriate. g) Riding, hiking and bicycle trails adjacent to or through the project site. h) Undergrounding of existing overhead and proposed utility distribution lines. i) Transit-related improvements depicted on the approved tentative ma j) Plans for improvements, including proposed and relocated utility lines, shall be approved by the Public Works Director/City Engineer based on the City's ordinances, standards, and policies, including, but not limited to, those design and construction standards adopted by the City or otherwise reasonably determined by the Director to be applicable to the project. Plans for signing, striping, and other traffic control devices shall be approved by the City Traffic Engineer. Water improvement plans shall be approved by the Fire Marshal, the local water district, and the Public Works Director/City Engineer. The water distribution system and appurtenances shall conform to the applicable laws and adopted regulations enforced by the Orange County Health Department. Public sewer and reclaimed water improvement plans shall be approved by the local sewer agency and the Public Works Director/City Engineer. The requirement for the reclaimed water line for irrigation is contingent upon an existing line within reasonable proximity to the site. Construction of improvements shall be under the inspection of the Public Works Department. <p>PPP GEO-6 (OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G6) Prior to issuance of a grading permit, any easement that lies within or crosses rights-of-way proposed to be deeded or dedicated to the City, shall be subordinated by the applicant to the City prior to City acceptance of the rights-of-way, unless otherwise exempted by the Director of Public</p>

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	<p>Works/City Engineer based on the City's ordinances, standards, and policies, including, but not limited, to those design and construction standards adopted by the City or otherwise reasonably determined by the Director to be applicable to the project.</p> <p>PPP GEO-7 (OSA PEIR MMRP Geology, Soils, And Mineral Resources Grading Standard Conditions of Approval G7) Prior to issuance of a grading permit, a recordable instrument providing for reciprocal ingress and egress access easements between and among the parcels with access via private drives shall be submitted by the applicant to the City of Lake Forest for review and approval of the City Attorney, Director of Development Services and the Director of Public Works/City Engineer. The instrument shall be approved if it is appropriate recordable form, and adequately provides for reciprocal access in a manner consistent with the City's ordinances, standards, and policies, including, but not limited, to those public design and construction standards adopted by the City or otherwise reasonably determined by the Directors to be applicable to the project.</p> <p>PPP GEO-8 (OSA PEIR MMRP Legal Requirements for Geology, Soils and Mineral Resources) Compliance with California Building Code Seismic Zone 4 Standards.</p> <p>PPP GEO-9 (OSA PEIR MMRP Legal Requirements for Geology, Soils and Mineral Resources) Site specific review by California Certified Engineering Geologist.</p> <p>PPP GEO-10 (OSA PEIR MMRP Legal Requirements for Geology, Soils and Mineral Resources) Implementation of National Pollution Discharge Elimination System (NPDES) Best Management Practices (BMPs).</p> <p>PPP GEO-11 (OSA PEIR MMRP Legal Requirements for Geology, Soils and Mineral Resources) Preparation and implementation of Storm Water Pollution Prevention Plan (SWPPP).</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.7 GREENHOUSE GAS EMISSIONS	
Existing Plans, Programs, and Policies	None
Project Design Features	<p>GHG PDF-1 (OSA PEIR MMRP Global Climate Change GCCPDF2) Residential development shall be constructed with the following features to reduce energy consumption so long as they pose no conflict with applicable Building Code requirements: installation of a majority of Energy Star appliances; installation of high efficiency HVAC equipment with SEER rating of 13 or higher and TXV valve; installation of vinyl frame windows with dual pane low emissivity glass; installation of natural gas clean burning fireplaces; installation of water efficient plumbing fixtures to reduce water consumption; and provision of an option to the homeowner to include electric vehicle charging facilities in the residence garage.</p>

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	<p>GHG PDF-2 (<i>OSA PEIR MMRP Global Climate Change GCCPDF3</i>) Bicycle lanes and walking paths shall be incorporated into the street system of new residential development to provide alternative circulation routes to reach logical points of destinations such as schools, parks and retail areas.</p>
<p>Applicable OSA Program EIR Mitigation Measures</p>	<p>The following mitigation measures are taken directly from the OSA PEIR. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and bold underlined to signify additions. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>GHG MM-1 (<i>OSA PEIR MMRP Mitigation Measure MM GCC1</i>) The City shall comply with the future requirements for implementation of AB 32 and SB 97 once those implementation requirements are developed. (<i>The City has satisfied this obligation through the analysis contained in this Supplemental Mitigated Negative Declaration.</i>)</p> <p>GHG MM-2 (<i>OSA PEIR MMRP Mitigation Measure MM GCC2</i>) Prior to the issuance of building permits for new commercial and retail projects or residential projects within the Opportunities Study Area, the City shall review the plans to confirm that the project complies with the requirements of Title 24 of the California Code of Regulations.</p> <p>GHG MM-3 (<i>OSA PEIR MMRP Mitigation Measure MM GCC4</i>) Prior to issuance of grading permits the The City shall identify energy efficient street lights and water and wastewater pumps and treatment systems which are currently available and which when installed will provide for a 10 percent reduction beyond the 2007 baseline energy use for this infrastructure, and shall require the use of this technology in all new development. All new traffic lights installed within the City shall use LED technology.</p> <p>GHG MM-4 (<i>OSA PEIR MMRP Mitigation Measure MM GCC5</i>) The City shall require all new development projects in the Opportunities Study Area to recycle and/or salvage at least 25 50 percent of nonhazardous construction and demolition debris. To implement this requirement, the applicant shall submit a construction waste management plan for review and approval of the Development Services Director prior to issuance of a Building Permit. The construction waste management plan shall identify materials to be diverted from disposal and whether the materials will be stored on-site or commingled. Excavated soil and land-clearing debris do not contribute to this credit. Calculation can be done by weight or volume but must be documented.</p> <p>GHG MM-5 (<i>OSA PEIR MMRP Mitigation Measure MM GCC6</i>) Prior to approval of a Site Development Permit for new development in the Opportunity Study Area, the City shall require that new development within the Opportunity Study Area use reclaimed water for public and common area landscaping where available; install 50 percent native/drought-tolerant plant species in developer-installed landscaped areas; and utilize “smart” advanced capability controllers (e.g., Weather-Trac) to reduce water and energy consumption.</p>

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<i>Type of Measure</i>	<i>PPPs, PDFs, and Mitigation Measures</i>
Project-Specific Mitigation Measures	None
3.8 HAZARDS AND HAZARDOUS MATERIALS	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to hazards:</p> <p>PPP HAZ-1 (<i>OSA PEIR MMRP Hazards Standard Condition</i>) Compliance with applicable federal, state, and local laws regulating generation, handling, transportation and disposal of hazardous materials and waste.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures are taken directly from the OSA PEIR. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and bold underlined to signify additions. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>HAZ MM-2 (<i>OSA PEIR MMRP Mitigation Measure 3.7-3</i>) Lane Closures - At least three business days prior to any lane closure, the construction contractor shall notify the OCSD and OCFA, of construction activities that would impede movement (such as road or lane closures) along roadways immediately adjacent to the Project Area, and obtain an encroachment permit from the Public Works Department, to allow for uninterrupted emergency access and maintenance of evacuation routes.</p> <p>HAZ MM-3 (<i>OSA PEIR MMRP Mitigation Measure 3.7-4</i>) Prior to issuance of building permits for any development within the Project Area, the City shall modify, to the extent necessary, the City's emergency response protocol and available emergency response resources, as outlined in the Emergency Preparedness Plan, to accommodate development. Such modifications shall ensure that the existing level of emergency service is maintained.</p> <p>HAZ MM-4 (<i>OSA PEIR MMRP Mitigation Measure 3.7-5</i>) The City will reduce the potential for dangerous fires by implementing fire hazard education, fire protection, and fuel modification programs in coordination with the Orange County Fire Authority (OCFA). In addition, all development located within portions of the Project Area that are designated as a VHFSHZ/SPPA by OCFA California Department of Fire and Forestry (CalFire) shall comply with OCFA VHFSHZ/SPPA guidelines. Site developer(s) shall be responsible for providing evidence to the City and the OCFA prior to the issuance of grading permits that water pressure is adequate for fire-fighting purposes.</p>
Project-Specific Mitigation Measures	None
3.9 HYDROLOGY AND WATER QUALITY	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to water resources:</p> <p>PPP WR-1 (<i>OSA PEIR MMRP Standard Conditions and Legal Requirements for Hydrology/Water Quality</i>)</p>

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	<p>Compliance with NPDES, DAMP, Groundwater Management Plan.</p> <p>PPP WR-2 (OSA PEIR MMRP Standard Conditions and Legal Requirements for Hydrology/Water Quality) Compliance with Lake Forest Municipal Code and County of Orange Codes regulating drainage and water quality.</p> <p>PPP WR-3 (OSA PEIR MMRP Standard Conditions and Legal Requirements for Hydrology/Water Quality) Compliance, where necessary with FEMA regulations for Special Flood Hazard Areas.</p> <p>PPP WR-4 (OSA PEIR MMRP Drainage/Flood/NPDES Standard Conditions of Approval DFN1) Prior to the issuance of a grading permit, a complete hydrology and hydraulic study (include off-site areas affecting the development) shall be prepared by a qualified engineer and shall be submitted by the applicant to the Director of Public Works/City Engineer for review and approval. The report shall include detailed drainage studies indicating how the grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.</p> <p>PPP WR-5 (OSA PEIR MMRP Drainage/Flood/NPDES Standard Conditions of Approval DFN2) Prior to the issuance of a grading permit, the applicant shall demonstrate to the Building Official that coverage has been obtained under California's General Permit for Storm Water Discharge Associated with Industrial Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number to the Building Official. Prior to the issuance of a grading permit, the applicant shall submit to the Building Official for review and approval a Stormwater Pollution Prevention Plan (SWPPP). A copy of the approved SWPPP shall be kept at the project site and available for review upon request.</p> <p>PPP WR-6 (OSA PEIR MMRP Drainage/Flood/NPDES Standard Conditions of Approval DFN3) Prior to the issuance of a grading permit, the applicant shall prepare a Water Quality Management Plan (WQMP) specifically identifying the Best Management Practices (BMP's) that will be used on site to control predictable pollutant runoff. The plan shall identify the types of structural and non-structural measures to be used. The plan shall comply with the Orange County Drainage Area Management Plan (DAMP). Particular attention should be addressed to the appendix section "Best Management Practices for New Development." The WQMP shall clearly show the locations of structural BMP's, and assignment of long term maintenance responsibilities (which shall also be included in the Maintenance Agreement). The plan shall be prepared to the general form and content shown in the City of Lake Forest's WQMP Template and shall be submitted to the Director of Public Works/City Engineer for review and approval. The DPW/CE shall approve the plan if the Director reasonably determines that the plan is substantially similar in all material respects to the City of Lake Forest's WQMP Template.</p> <p>PPP WR-7 (OSA PEIR MMRP Drainage/Flood/NPDES Standard Conditions of Approval DFN4) Prior to the issuance of a certificate of occupancy building permit final inspection, the applicant shall demonstrate that all structural Best Management Practices (BMP) described in the project's Water Quality Management Plan (WQMP) have been constructed and installed. In addition, the applicant is prepared to implement all non-structural BMP's described in the project's WQMP. Two (2) copies of the WQMP shall be available on-</p>

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	<p>site. Prior to the issuance of a certificate of occupancy <u>building permit final inspection</u>, all equipment shall be in place and in good working order as indicated in the WQMP.</p>
Project Design Features	<p>The following Project Design Feature (PDF) relates to potential water resources impacts:</p> <p>PDF WR-1 (<i>OSA PEIR MMRP Project Design Features for Hydrology/Water Quality</i>) Subsequent related development projects will include specific project design features for hydrology and water quality developed with project level entitlements.</p>
Applicable OSA Program EIR Mitigation Measures	<p>WQ MM-2 (<i>OSA PEIR MMRP Mitigation Measures for Hydrology/Water Quality MM 3.8-1</i>) Prior to approval of a Parcel Map or a Tentative Tract Map (whichever comes first), the applicant shall submit a Water Quality Management Plan (WQMP), including a hydrology study, if appropriate, for review and approval of the City Engineer. The Plan shall include Best Management Practices (BMPs) in accordance with the latest City of Lake Forest Water Quality Management Plan Template User Guide and include stormwater detention/retention features, if necessary, to mitigate impacts of changes in stormwater rates or volumes as identified in the site-specific hydrology study. (<i>Satisfied with: Water Quality Management Plan (WQMP) for: Tentative Tract No. 15594, City of Lake Forest, County of Orange. Hunsaker and Associates Irvine, Inc. July 27, 2011.</i>)</p> <p>WQ MM-3 (<i>OSA PEIR MMRP Mitigation Measures for Hydrology/Water Quality MM 3.8-2</i>) All City landscape contractors and project developers shall be required, as part of their contract, to submit to the City a landscape design plan including the following elements:</p> <ul style="list-style-type: none"> • Maximized use of native plant species with minimum water and fertilizer requirements • Watering shall be kept to the minimum necessary to maintain new landscaping • Drip irrigation shall be used only until the native landscaping is established • Minimal use of fertilizers and pesticides <p>WQ MM-4 (<i>OSA PEIR MMRP Mitigation Measures for Hydrology/Water Quality MM 3.8-3</i>) Prior to the issuance of a grading permit, the applicant shall be required to join the Nitrogen and Selenium Working Group in order to establish eligibility for the de minimus permit implemented by the Santa Ana Region of the RWQCB.</p> <p>WQ MM-5 (<i>OSA PEIR MMRP Mitigation Measures for Hydrology/Water Quality MM 3.8-4</i>) Prior to the issuance of a grading permit, the applicant shall develop and implement appropriate Best Management Practices, such as a nutrient management program, to reduce the amount of nutrients entering the watershed (see San Luis Rey Watershed Urban Runoff Management Program http://www.projectcleanwater.org/html/wurmp_san_luis_rey.html) for an example of a management program that addresses nutrients). In addition, a pesticide management program shall be developed to reduce the amounts of pesticides entering the watershed through minimizing the use of pesticides and emphasizing s non-chemical controls (see the City of San Francisco’s Integrated Pest Management Program (http://www.sfgov.org/site/frame.asp?u=http://www.sfwater.org/) for an example). These plans shall be approved by the City prior to issuance of a grading permit. (<i>Satisfied with: Water Quality Management Plan (WQMP) for: Tentative Tract No. 15594, City of Lake Forest, County of Orange.</i>)</p>

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	<i>Hunsaker and Associates Irvine, Inc. July 27, 2011.)</i>
Project-Specific Mitigation Measures	None
3.10 LAND USE AND PLANNING	
Existing Plans, Programs, and Policies	<p>The following measure is an existing plan, program, or policy (PPPs) that applies to the proposed project and will help to reduce and avoid potential impacts related to land use:</p> <p>PPP LU-1 (<i>OSA PEIR MMRP Standard Conditions and Legal Requirements for Planning</i>) Compliance with Lake Forest Municipal Code, including Zoning, Planned Community Text(s) as appropriate, Lake Forest General Plan policies, and the California Building Code.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.11 MINERAL RESOURCES	
Existing Plans, Programs, and Policies	None
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.12 NOISE	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to noise:</p> <p>PPP N-1 (<i>OSA PEIR MMRP Legal Requirements for Noise</i>) Compliance with Chapter 11.16, Noise Control, of the Lake Forest Municipal Code.</p> <p>PPP N-2 (<i>OSA PEIR MMRP Noise Standard Condition N1</i>) Prior to the issuance of a grading permit, the applicant shall produce written evidence, or other evidence deemed reasonably acceptable by the Director of Development Services, that all construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of any residential dwelling unit shall be equipped with properly operating and maintained mufflers.</p>

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	<p>PPP N-3 (OSA PEIR MMRP Noise Standard Condition N2) Grading and construction, construction activities shall be prohibited between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday; 6:00 p.m. and 8:00 a.m. Saturday; and at any time on Sunday or a federal holiday.</p> <p>PPP N-4 (OSA PEIR MMRP Noise Standard Condition N3) Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the applicant shall submit a final acoustical report prepared to the satisfaction of the Director of Development Services. The report shall show that the development will be sound attenuated against present and projected noise levels, including roadway and railroad, to meet City interior and exterior noise standards. In order to demonstrate that all mitigation measures have been incorporated into the project, the report shall be accompanied by a list identifying the sheet(s) of the building plans that include the approved mitigation measures.</p> <p>PPP N-5 (OSA PEIR MMRP Legal Requirements for Noise) Compliance with Chapter 11.16, Noise Control, of the Lake Forest Municipal Code.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures (3.10-1 to 3.10-3) are taken directly from the OSA PEIR. Modifications to the original mitigation measures are identified in strikeout text to indicate deletions and bold underlined to signify additions. They have been renumbered in this document for ease of reference. All of the mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>Noise MM-1 (OSA PEIR MMRP Mitigation Measure MM 3.10-1) A condition of approval shall be placed on all Site Development Permit and/or Use Permit approvals for site-specific developments, which states:</p> <ul style="list-style-type: none"> • Construction staging areas, material delivery (loading/unloading) areas and operation of earth moving equipment on a project site shall be located so as to maintain the greatest distance from existing residential uses and other noise-sensitive uses and shall be more than 25 feet away from sensitive receptors (such as residences, schools, hospitals). If equipment will be operated within 25 feet of any sensitive receptor, the applicant shall prepare a construction plan which quantifies the anticipated vibration levels associated with the construction (in VdB) and the length of time the construction is to occur, and documents efforts to minimize impacts associated with groundborne vibration. • <u>Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer’s recommendations to minimize noise emissions.</u> • <u>Prior to use of any construction equipment, the contractor shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds which are no less effective than as originally equipped by the manufacturer.</u> • <u>The construction contractor shall post a clearly visible sign at the construction site boundary listing a contact name and telephone number for lodging a noise complaint.</u> <p>Noise MM-2 (OSA Program EIR Mitigation Measure MM 3.10-2) Prior to the <u>first approval of the tentative tract map</u> issuance of a Site Development Permit and/or Use Permit for site-specific development within</p>

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	<p>the Project Area, the City shall conduct a tiered site-specific analysis under CEQA to determine whether the individual project will expose sensitive receptors to either a substantial increase in ambient noise resulting from increased traffic volumes generated by that project or excessive groundborne vibration or groundborne noise levels. Where significant impacts are identified, appropriate mitigation shall be required. <i>(Satisfied by Noise Impact Analysis in this Initial Study January 2012).</i></p> <p>Noise MM-3 (OSA PEIR MMRP Mitigation Measure MM 3.10-3). A condition of approval shall be placed on all Site Development Permit and/or Use Permit approvals for site-specific developments, which states:</p> <ul style="list-style-type: none"> • Prior to issuance of a building permit, the applicant shall submit plans for shielding of all HVAC equipment to provide noise attenuation that will reduce noise from HVAC systems to 65 dBA or less when measured at 50 feet from the noise source.
Project-Specific Mitigation Measures	None
3.13 POPULATION AND HOUSING	
Existing Plans, Programs, and Policies	None
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.14 PUBLIC SERVICES	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to fire protection services:</p> <p>PPP PS-1 (OSA PEIR MMRP Fire Protection Standard Conditions of Approval F1) Prior to issuance of a grading permit, the applicant shall obtain approval of the Fire Chief for all fire protection access roads within 150 feet of all portions of the exterior of every structure on the site. The site plan shall indicate existing and any proposed fire hydrants. The site plan shall indicate the locations of the existing and/or proposed fire lane markings. Please contact the OCFA at (714) 573-6100 or visit the OCFA website to obtain a copy of the "Guidelines for Emergency Access."</p> <p>PPP PS-2 (OSA PEIR MMRP Fire Protection Standard Conditions of Approval F2) Prior to the issuance of a grading permit, the applicant shall submit construction details for any access gate to the Fire Chief for review and approval. The Fire Chief will approve the construction details if the Chief reasonably determines that the construction details are in compliance with the Uniform Fire Code and such other Federal, State, and Local laws, regulations, ordinances, standards, and policies as are applicable.</p>

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	<p>PPP PS-3 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F3</i>) Prior to the issuance of a building permit, the applicant shall submit evidence of the on-site fire hydrant system to the Fire Chief and indicate whether it is public or private. If the system is private, it shall be reviewed and approved by the Fire Chief prior to building permit issuance, and the applicant shall make provisions for the repair and maintenance of the system in a manner meeting the approval of the Fire Chief.</p> <p>PPP PS-4 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F4</i>) Prior to the issuance of a building permit for combustible construction, the applicant shall submit a letter on company letterhead stating that water for fire-fighting purposes and all weather fire protection access roads shall be in place and operational as required by the Uniform Fire Code before any combustible materials are placed on the site.</p> <p>PPP PS-5 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F5</i>) Prior to the issuance of a building permit, the applicant shall provide evidence of adequate fire flow. The “Orange County Fire Authority Water Availability for Fire Protection” form shall be signed by the applicable water district and submitted to the Fire Chief for approval. If sufficient water to meet fire flow requirements is not available an automatic fire extinguishing system may be required in each structure affected.</p> <p>PPP PS-6 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F6</i>) Prior to the issuance of a building permit, plans for the automatic fire sprinkler system shall be submitted to the Fire Chief for review and approval. This system shall be operational prior to building permit final inspection.</p> <p>PPP PS-7 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F7</i>) Prior to building permit final inspection, the fire alarm system shall be operational.</p> <p>PPP PS-8 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F8</i>) Prior to the issuance of a building permit, the applicant shall contact the Orange County Fire Authority Hazardous Materials Disclosure Office at (714) 744-0463 to complete and submit a “Hazardous Materials Business Information and Chemical Inventory Packet.”</p> <p>PPP PS-9 (<i>OSA PEIR MMRP Fire Protection Standard Conditions of Approval F9</i>) Prior to building permit final inspection, all fire hydrants shall have a “Blue Reflective Pavement Marker” indicating its location on the street or drive per the Orange County Fire Authority Standard and are subject to review and approval by the Fire Chief. On private property these markers are to be maintained in good condition by the property owner.</p> <p>PPP PS-10 (<i>OSA PEIR MMRP Standard Conditions and Legal Requirements for Public Services</i>) As requested by the Orange County Fire Authority, site-specific development plans shall include provisions for installation of Optical Traffic Preemption devices on new or upgraded traffic signals within the site area as deemed necessary by the City with input by the OCFA.</p> <p>PPP PS-11 (<i>OSA PEIR MMRP Standard Conditions and Legal Requirements for Public Services</i>)</p>

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Summary of Mitigation Measures

Type of Measure	PPPs, PDFs, and Mitigation Measures
	<p>Compliance with OCFA Very High Fire Severity Hazard Zone/Special Fire Protection Area guidelines.</p> <p>PPP PS-12 (OSA PEIR MMRP Standard Conditions and Legal Requirements for Public Services) Payment of statutory fees for public services (or enter into mitigation agreement for schools as a project design feature). See Mitigation Measure 3.12-3.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	<p>The following mitigation measures are taken directly from the OSA PEIR with no changes made. The mitigation measures have been renumbered in this document for ease of reference. The mitigation measures listed apply to and will be implemented for the proposed project.</p> <p>PS MM-1 (OSA PEIR MMRP Mitigation Measure 3.12-1) Any development shall comply with OCFA's VHFSHZ/SEPA guidelines.</p> <p>PS MM-2 (OSA PEIR MMRP Mitigation Measure 3.12-2) Prior to approval of each Master, Tentative Tract, or Project Tract Map, issuance of grading permits the site developers shall enter into a Secured Fire Protection Agreement with OCFA that will ensure an adequate level of service is maintained in the City. <u>Evidence of an OCFA approved agreement shall be submitted to the Development Services Department.</u></p> <p>PS MM-3 (OSA PEIR MMRP Mitigation Measure MM 3.12-3) Consistent with current City requirements, the developer shall pay statutory school fees in effect at the time of issuance of building permits to SVUSD and/ or enter into a mitigation agreement. (Satisfied by the project's recorded Development Agreement)</p> <p>PS MM-4 (OSA PEIR MMRP Mitigation Measure 3.12-4) Prior to issuance of building permits, the developer(s) shall pay to Orange County Public Library the library impact fees in effect at the time of building permit issuance.</p>
Project-Specific Mitigation Measures	None
3.15 RECREATION	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to recreation:</p> <p>PPP R-1 (OSA PEIR Project Design Feature for Recreation) The proposed project includes community parks and neighborhood parks in excess of subdivision code requirements.</p> <p>PPP R-2 (OSA PEIR Standard Conditions and Legal Requirements for Recreation) Compliance with the City's Subdivision Ordinance and Development Agreement obligations (Title 7 of the Lake Forest Municipal Code) is required of all new residential development.</p>

Summary of Mitigation Measures

Summary of Mitigation Measures

Type of Measure	PPPs, PDFs, and Mitigation Measures
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.16 TRANSPORTATION/TRAFFIC	
Existing Plans, Programs, and Policies	<p>The following measure is an existing plan, program, or policy (PPPs) that applies to the proposed project and will help to reduce and avoid potential impacts related to transportation and traffic:</p> <p>PPP T-1 (OSA PEIR MMRP Transportation/Traffic FFPI) Prior to the issuance of a building permit, the applicant shall pay fees to the City of Lake Forest as prescribed in the Major Thoroughfare and Bridge Fee Program, including but not limited to the following:</p> <ul style="list-style-type: none"> • Foothill Circulation Phasing Plan – Zone 2 • Foothill/Eastern Transportation Corridor – Zone A • Santiago Canyon Road
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None
Project-Specific Mitigation Measures	None
3.17 UTILITIES AND SERVICE SYSTEMS	
Existing Plans, Programs, and Policies	<p>The following measures are existing plans, programs, or policies (PPPs) that apply to the proposed project and will help to reduce and avoid potential impacts related to utilities and service systems:</p> <p>PPP USS-1 (OSA PEIR MMRP Standard Conditions and Legal Requirements for Utilities/Service Systems) Compliance with Source Reduction and Recycling Element for solid waste reduction.</p> <p>PPP USS-2 (OSA PEIR MMRP Standard Conditions and Legal Requirements for Utilities/Service Systems) Compliance with Title 24, California’s Energy Efficiency Standards for Residential and Non-Residential Buildings.</p>
Project Design Features	None
Applicable OSA Program EIR Mitigation Measures	None

Summary Mitigation Measures

Summary of Mitigation Measures

<i>Type of Measure</i>	<i>PPPs, PDFs, and Mitigation Measures</i>
Project-Specific Mitigation Measures	None